XP-002307126

AN - 2004-585912 [57]
AP - JP20030017086 20030127
CPY - TORA
DC - F02
FS - CPI
IC - D02J1/18
MC - F01-H06B F03-D04
PA - (TORA) TORAY IND INC
PN - JP2004225222 A 20040812 DW200457 D02J1/18 012pp
PR - JP20030017086 20030127
XA - C2004-213765
XIC - D02J-001/18
AB - JP2004225222 NOVELTY - The method involves opening the reinforced
    fiber bundle (1) by conveying the reinforced fiber bundle between the
    transverse-oscillation rolls (6a) vibrated in roll-axis direction and
    the longitudinal-oscillation rolls (6b) vibrated in conveying
    direction of reinforced fiber bundle.
    - DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
    following:
    - (1) opening apparatus of reinforced fiber bundle; and
    - (2) manufacturing method of unidirectional prepreg.
    - USE - For opening reinforced fiber bundle e.g. carbon fiber bundle,
    glass fiber bundle and aramid fiber bundle during manufacturing of
    unidirectional prepreg used for molding fiber reinforced plastic
    (FRP).
    - ADVANTAGE - The reinforced fiber bundle is opened at high speed,
    without generating fiber breakage.
    - DESCRIPTION OF DRAWING(S) - The figure shows an outline front view of
    the reinforced fiber bundle opening apparatus.
    - reinforced fiber bundle 1
    - double rolls 2
    - transverse-oscillation roll 6a
    - longitudinal-oscillation rolls 6b
    - free rotation rolls 6c,6d
    - reinforced fiber sheet 8
    - (Dwg.1/5)
IW - REINFORCED BUNDLE OPEN METHOD UNIDIRECTIONAL PREPREG MANUFACTURE
    CONVEY BUNDLE TRANSVERSE LONGITUDE OSCILLATING ROLL VIBRATION ROLL
    AXIS DIRECTION BUNDLE CONVEY DIRECTION
IKW - REINFORCED BUNDLE OPEN METHOD UNIDIRECTIONAL PREPREG MANUFACTURE
    CONVEY BUNDLE TRANSVERSE LONGITUDE OSCILLATING ROLL VIBRATION ROLL
    AXIS DIRECTION BUNDLE CONVEY DIRECTION
NC - 001
OPD - 2003-01-27
ORD - 2004-08-12
PAW - (TORA) TORAY IND INC
TI - Reinforced fiber bundle opening method in unidirectional prepreg
    manufacture, involves conveying fiber bundle between transverse and
    longitudinal oscillation rolls vibrated in roll-axis direction and
    bundle conveying direction